EXPLORATION WORKSHOP CONCEPTS

1996 Final Report

Prepared by:
The University of Alabama in Huntsville
Division of Continuing Education - Professional Development
Karen B. Mack, Director
Andrea Milligan, Program Coordinator

ABLE OF CONTENTS

I. Introduction

II. Evaluation of Overall Concepts

Purpose

Organizational Structure

Forum Location

Promotional Materials

III. 1996 Forum Summary

Forum Summary

Additional Participating Organizations

Children's Forum

Speakers

Program Format

Marketing

Ticket Distribution

Participant Comments

Effectiveness

Critical Problem Areas and Suggested Action

IV. Appendix

Speaker Biographies

Participant Comments

Newspaper Articles

Promotional Materials

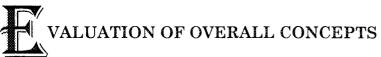
NTRODUCTION

The University of Alabama in Huntsville's (UAH), Division of Continuing Education has developed this final report for the 1996 Von Braun Exploration Forum.

The objective of this report is to provide a final evaluation and assessment of the workshop concept. The report outlines the activities and promotional materials related to the event. The report also examines the purpose, method and effectiveness of the planning and implementation process for 1996. Critical program areas and suggested action items are outlined for evaluation in future program planning.

The 1996 final report summarizes the following information:

- Evaluation of Overall Concepts
- ♦ 1996 Forum Summary
- Speaker Biographies
- Promotional Materials
- Participant Comments



Purpose

NASA/Marshall Space Flight Center began offering exploration workshops in 1988. The workshops are offered in an attempt to better educate the public, showcase NASA accomplishments, and share the benefits of exploration. Each workshop examines past, present, and future explorations as well as the impact of these explorations on mankind. In an effort to reach the widest audience possible, the workshops are free of charge.

To commemorate the contributions that Dr. Wernher von Braun made to space exploration and the Huntsville area, the workshops are fittingly titled the Von Braun Exploration Forums. The workshops are an excellent vehicle to keep alive Dr. von Braun's vision and dedication to exploration. Dr. von Braun's strong ties to Marshall Flight Center and the Huntsville community make Huntsville, Alabama an appropriate location for the forums.

With special guest speakers and video, the Forum brings together scientists, engineers, politicians and entertainers interested in the space program. The Forum recognizes and celebrates the emotion, adventure, and importance of exploration to humankind. Themes on exploration vary from space to underwater to new civilizations, and examine past explorers to today's astronauts.

Organizational Structure

Representatives from various sponsoring agencies and individuals from the Huntsville aerospace community make up the planning committee for the Forum. Primary sponsors include:

- ♦ The Discovery Channel
- NASA/Marshall Space Flight Center
- ♦ The University of Alabama in Huntsville
- The U.S. Space and Rocket Center
- ♦ Comcast Cable Company

The committee is assigned the task of organizing and managing the Forum. The planning committee is directed by Dr. Charles R. Chappell, Associate Director for Science and NASA/Marshall Space Flight Center. The committee selects possible themes for the Forum which are then finalized by Dr. Chappell. Appropriate speakers and entertainers are then outlined and researched. Once these decisions are finalized, the committee implements plans for program format, video and music, marketing and logistical arrangements.

The University of Alabama in Huntsville's (UAH), Division of Continuing Education, Professional Development Office coordinates the Forum. UAH provides in-house reproduction facilities, graphics staff and equipment, and a full-time coordinating staff. UAH's responsibilities include logistical planning, facilities arrangements, advertising, ticket distribution and speaker arrangements.

NASA/Marshall Space Flight Center provides the contacts, technical support, media recognition to produce the activity. In addition, NASA takes the lead role in selecting the theme, developing the program format, and securing guest speakers. NASA also selects various representatives from different areas of the Center to serve on the planning committee.

The U.S. Space and Rocket Center (SRC) provides exceptional opportunities to "target market" the Forum. The SRC provides input in ways the Forum can be used to better educate young people. This includes methods for involving students and teachers in and out the classroom, in the U.S. Space Camp, in various student contests prior to the Forum, and as actual participants in the Forum.

Based on the changing program themes and opportunities each year, other agencies are asked to assist in sponsoring and planning the Forum. These have included organizations such as the National Space Club, AIAA, and the National Space Society. In addition to opening up new venues for promotion and program development, these organizations provide forum speakers and additional participants to the event. The National Space Society was instrumental in providing astronauts to speak to middle school students prior to the Forum.

Perhaps the most well-known contributor to the 1996 Forum was the Discovery Channel. Through the efforts of the Discovery Channel, the Huntsville community was able to enjoy a speech by veteran news correspondent, Walter Cronkite. In addition to the delightful opening remarks made by Mr. Cronkite, the audience was treated to a world premier film documenting the life of Dr. Wernher von Braun. The film, *He Conquered Space*, was broadcast live from Huntsville courtesy of Comcast Cable Company.

Forum Location

The Forum is held at the Von Braun Civic Center, 700 Monroe Street in Huntsville, Alabama. Named after Wernher von Braun, the Center features an arena, exhibit halls, a concert hall, playhouse and art museum.

The Concert Hall is a performing venue for Broadway shows, symphonies and conference meetings. The stage has a 54' x 48' performing area, a hydraulic orchestra pit, a 54 line counterweight system, a full orchestra acoustical shell, and complete sound and lighting systems. Rehearsal rooms, dressing rooms, and the Green Room reception area are adjacent to the Concert Hall. The floor area of the Concert Hall seats 1502 and the balcony area seats 669 for a total of 2171 available seats.

The Von Braun Exploration Forum required two days of rental. The rental days include one day move-in and one event day. Move-in day consists of staging set up, video and sound rehearsal, and program rehearsal. On the second day, the event was held and equipment and supplies were moved out.

Rental of the hall includes lighting, heating and/or air conditioning, and water as installed. With the exception of basic production sound and lighting equipment, all labor, supplies and equipment are considered additional expenses and are charged at rates as outlined by the Von Braun Civic Center.

Promotional Materials

Standard promotional materials include flyers, posters, public service announcements on radio and television, and newspaper articles and advertisements.

A flyer and poster were designed and distributed for the event. Posters were distributed to local companies and organizations. The fliers were mailed to potential participants using internal mailing lists provided by UAH, the Chamber of Commerce, National Space Club, and other various organizations. Public service ads were also run by the Huntsville Times. In addition, press releases and calendar announcements were used as a means of advertising the event both locally and nationally. Primary sources included the Huntsville Times, Decatur Daily, Madison County Record, Marshall Star, Redstone Rocket, Defense News, Space News, National Space Club newsletters, and other local publications. The National Space Society also used its contacts to generate interest in the Forum.

As part of the event, a printed program was distributed to Forum participants at the beginning of the evening. The program included an agenda and speaker biographies.

(Sample promotional documents located in the Appendix)



Date and Time

Friday, October 18, 1996, 7:00 p.m.

Location

Von Braun Civic Center, Concert Hall

Number of Attendees

Approximately 1634 (includes 240 middle school children, and crew members)

Theme

He Conquered Space

He Conquered Space is an original Discovery Channel film that made its world premier at the Von Braun Forum. The film high-lighted Huntsville's very own Wernher von Braun who pioneered space exploration. Opening remarks about von Braun's life and vision were made by Walter Cronkite, Special Correspondent, CBS News.

Additional Participating Organizations:

The Discovery Channel, Comcast Cable Company, The U.S. Space and Rocket Center, The University of Alabama in Huntsville, The National Space Society.

Children's Forum

In addition to the regular participants of the Forum, 240 middle school students from the Huntsville City Schools and Madison County Schools were special guests at the Forum. Prior to the actual event, the children were privileged to meet with astronauts Charlie Walker, Byron Litchenberg, and Owen Garriott in small group settings. The children were divided into groups to receive one-on-one instruction from the astronauts. The children learned about life in space, and what it takes to become an astronaut. The children also enjoyed pizza and cookies before they were escorted by the Grissom ROTC to reserved seating at the Forum.

Forum Speakers

Walter Cronkite - Special Correspondent, CBS News John Hendrix - Founder, Chairman and CEO of Discovery Communications, Inc.

Program Format

Introduction/Welcome - Rick Chappell
Introductory Remarks - Walter Cronkite
Film Introduced by John Hendrix - He Conquered Space
Closing Thoughts - Walter Cronkite

Marketing

Posters and flyers were distributed to the Madison County area. A total of 9,500 fliers were mailed. Ads, releases, articles and inserts appeared in the following publications:

- ♦ The Huntsville Times
- ♦ UAH Continuing Education Catalog
- ♦ Space News Calendar
- ♦ Defense News Calendar

Ticket Distribution

Tickets were required to attend the Forum even though the event was free. The table below summarizes the distribution and usage.

Location	<u># Number</u>	# Used	<u>% Used</u>
	<u>Given</u>		
Parisian Parkway City	250	132	53%
Parisian Madison Square	130	74	57%
UAH Continuing Education	100	52	52%
VBCC Box Office	243	136	56%
NASA - Building 4200	550	294	53%
Missy Ming Smith	50	10	20%
Total Tickets Taken at Door			698
Total Tickets Distributed			1323
Percentage of Tickets Used			53%
Total count from turnstyles for dinner guests/school children			881
Total count from turnstyles for public*			703
Total backstage crew and staff			50
(estimated)			1004
Total for entire audience			1634

^{*}This number is slightly higher because a few dinner guests entered through the front doors and were seated in public seats. Also, some guests came without tickets.

Both turnstyle counts should probably be a little higher because some people refused to go through turnstyles.

Participant Comments

Included in the printed program were comment cards for participants to complete and mail back. A summary of these comments is included in the appendix.

Effectiveness

Since the Forum has been done for several years, the effectiveness continues to improve. The organizational structure of the committee has improved through the development of clearer guidelines and responsibilities, available historic data for planning, and increased experience of committee members.

The involvement of the Discovery Channel contributed greatly to the success of the program. Walter Cronkite proved (as always) to be a favorite of the audience and organizers alike. The program format of the film was considered by many to be a great success

The Forum was offered on a Friday evening. All feedback points toward this as the best day of the week for future forums. The Friday evening format works well because the audience can relax without having to worry about work and school the next day.

Critical Problem Areas And Suggested Action

The Forum is free to the public, but tickets are required for attendance to the events. Due to limited seating in the VBCC Concert Hall, tickets are used as a method to control and count the number of attendees. Past history shows a low usage rate of tickets averaging around 50%. This percentage seems to vary based on the popularity of the speaker.

SUGGESTED ACTION: Try not issuing tickets and let everyone take an equal chance of arriving that evening and locating seats on a first-come, first-served basis. The extra effort required to pick up a ticket does not develop a "commitment" to attend. It may discourage those who do have a ticket from attending.



FORUM SPEAKERS

JOHN S. HENDRICKS

Founder, Chairman and CEO Discovery Communications, Inc.

John S. Hendricks is founder, Chairman of the Board and Chief Executive Officer of Discovery Communications, Inc. (DCI).

Discovery Communications, Inc.(DCI) is a privately held, diversified media company headquartered in Bethesda, MD. Hendricks incorporated his company, originally called Cable Educational Network, Inc., in 1982 in order to develop a new cable television service. As a result of these efforts, Discovery Channel was launched on June 17, 1985.

As the founder of Discovery Channel, Hendricks created America's first cable network designed to provide world class documentary programming in the areas of nature, science and technology, history, human adventure and world exploration. With an initial investment of \$25 million and Hendricks' vision, the Discovery Channel has become one of the largest cable television networks, serving 98.5 million subscribers in 146 countries worldwide.

The Learning Channel, which the company acquired in May 1991, complements Discovery Channel with its mission to consistently offer people of all ages—from pre-schoolers on—an enjoyable, entertaining way to learn and satisfy their natural curiosity. TLC is the fastest growing midsize network reaching 50 million subscribers in the United States and 5 million subscribers in Canada.

Hendricks has been profiled in *Business Week* magazine, and has made appearances on television programs such as the *CBS Evening News*, *CNN's Crossfire* and *Larry King Live!*, and *PBS' Technopolitics*. He became the first corporate leader to receive the NEA's *Friend of Education* award for "innovations in education and technology and greatly expanding educational opportunity for America's schoolchildren." This award has in the past been presented to such noted figures as President Lyndon Johnson and Supreme Court Justice Thurgood Marshall.

CHARLES RICHARD (RICK) CHAPPELL

Visiting Professional Scholar First Amendment Center

In September 1996, Chappell joined the First Amendment Center as a Visiting Professional Scholar to conduct a joint project with Visiting Professional Scholar Jim Hartz to examining the media's portrayal and coverage of news related to science and technology.

As associate director for science at NASA's Marshall Space Flight Center in Huntsville, Alabama, he serves as the chief scientist for the center. He advises the center's director on all science and university programs while maintaining interaction with leading scientists throughout the world. He has directed research in solar terrestrial physics and has been a principal investigator on several satellite missions.

Prior to joining NASA in 1974, he was a research and staff scientist with the Lockheed Missiles and Space Company, where he conducted investigations of the earth's space plasma environment.

From May 1994 to May 1995, Chappell worked with Vice President Al Gore to create the Global Learning and Observations to benefit the Environment (GLOBE) program, an innovative K-12 science/education program involving students around the world.

From 1976 to 1985, Chappell was the mission scientist for Spacelab 1, a joint European/American shuttle mission that conducted investigations in material sciences, life sciences, space physics, earth observations and astronomy. In December 1985, he was selected to train as an alternate payload specialist for the space shuttle mission STS-45, which was carried out in March 1992.

As a scientist and spokesman for the space program, Chappell has been interviewed on NBC's *Today Show*, ABC's *Nightline* and the BBC. He has also provided color commentary on CNN for space shuttle missions.

Chappell graduated magna cum laude in physics from Vanderbilt University and received a Ph.D degree in space science from Rice University. He has authored more than 150 published scientific articles and has served on numerous advisory committees for NASA and for the National Academy of Sciences. He is a member of Phi Beta Kappa and is the two-time recipient of the NASA Medal for Exceptional Scientific Achievement.

WALTER CRONKITE CBS News Special Correspondent

Walter Cronkite has covered virtually every major news event during his more than 60 years in journalism - the last 45 affiliated with CBS News. He became a Special Correspondent for CBS News on March 6, 1981, when he stepped down as anchorman and managing editor of the CBS EVENING NEWS after nearly 19 years in that role.

Cronkite joined CBS News in Washington as a Correspondent in July 1950. He assumed his duties on the CBS EVENING NEWS on April 16, 1962, when the broadcast was 15 minutes in length. On September 2, 1963, the CBS EVENING NEWS became network television's first half-hour weeknight news broadcast; its debut featured Cronkite's headline-making interview with President John F. Kennedy.

Upon his departure from the nightly news broadcast, Cronkite's contributions to broadcast news and to journalism were lauded in newspapers and magazines throughout the world. Among the observations made by writers in their tributes to the CBS newsman were: "He established a remarkable trust and admiration in his audience," "(His) important contribution was to build and sustain the integrity of the network newscasts, and the threats to that legacy are not now strong enough to prevail," "He never discarded his concern for keeping the news straight," "He maintained a steady standard of professional excellence."

Cronkite came to be regarded as an authority on America's space program, reporting on the first two decades of this country's manned space mission from Alan B. Shepard's first flight in 1961 and the Apollo 11 moon landing in 1969 to the experimental flights of the space shuttle Enterprise in July 1977 and the fall of Skylab in July 1979.

He was honored with an award from the Skyline Foundation in 1978 for "distinguished contributions to the understanding of aerospace progress," and received the Boston Museum of Science's Bradford Washburn Award for his "superlative presentation of the U.S. Space program" (1970). He also received Emmy Awards for his reporting on several Apollo flights, including Apollo 11, when man first landed on the moon. Recalling moments from that historic mission, Cronkite admits, "I experienced a first in my life, too. I found myself on the air speechless."

Born in St. Joseph, Mo., on November 4, 1916, Cronkite began his journalism career as a campus correspondent at the Houston Post, where he worked part-time during high school and his freshman year at the University of Texas. His first full-time job after college was as a sports announcer for a local radio station in Oklahoma City and, in 1937, he joined United Press where he remained for 11 years.

In addition to his ongoing assignments as a Special Correspondent for CBS, Mr. Cronkite hosts many public affairs and cultural programs for PBS and syndication. In 1993 he and former CBS colleague, Jonathan Ward, formed their own production company, and since that time *The Cronkite Ward Company* has produced more than 25 award-winning documentary hours for The Discovery Channel, PBS and other networks.

Currently, *Cronkite Ward* is producing an eight part series of Mr. Cronkite's memoirs entitled *Cronkite Remembers*, which is scheduled to air on the Discovery Channel early in 1997.

Mr. Cronkite and his wife of 56 years live in New York City.

OWEN K. GARRIOTT

Owen Garriott was one of the first six scientist-astronauts selected by NASA. His first space flight aboard Skylab in 1973 set a new world record for duration of approximately 65 days -- more than double the previous record. Extensive experimental studies of our sun, of earth resources and in various life sciences relating to human adaptation to weightlessness were made. His second space flight was aboard Spacelab-1 in 1983, a multidisciplinary and international mission of ten days.

He received a NASA fellowship for one year's study at Stanford and held posts of Deputy and Acting Director of Science and Applications at Johnson Space Center. In the latter post, he was responsible for all research in the physical sciences at the Johnson Space Center. From 1984-86, he held the position of Program Scientist in the Space Station Program Office. In this position he worked closely with the external scientific communities and advised the Program Manager concerning the scientific suitability of the Space Station Design.

DR. BYRON LICHTENBERG

Byron Lichtenberg was the first payload specialist, flying aboard the Shuttle Columbia on November 28, 1983. He conducted protein crystal experiments on that mission. He is the founder of Payload Systems, Inc., a company that

develops low-gravity experiments for companies and institutions wanting to commercialize outer space.

CHARLES D. WALKER

Charles D. Walker is Senior Specialist for Advanced Space Programs at McDonnell Douglas Space and Defense Systems.

Walker was the first non-career, industry-sponsored astronaut, serving as payload specialist on the Space Shuttle missions. On these flights, Walker operated equipment designed by McDonnell Douglas, for its biotechnology commercialization program and accumulated 20 days and 8.2 million miles of space flight experience.



How did you find our about the Forum?

Newspaper
Rotarian invitation
MSFC News Flyer
National Space Club Membership
Radio
NSC Member
Alabama Aerospace Teacher's Assoc.
Friend
Friend on VBCC Board
Invitation
UAH Advertising
Phi Theta Kappa sponsor
Attended before
AATA
NASA

Any comments or suggestions:

The members of Von Braun's team that were present should have been s eated in the front, in a place of honor.

Prefer live format—rather than film presentation

General admission admittance to the concert hall was unduly constricting and generally bozo.

It was much better without the children.

Doors weren't opened until 6:50 and large crowd of people were waiting and began pushing. Only 3 doors opened. Unsafe!

Outstanding program.

Should recognize Von Braun team members by name at forum and dinner.

Great program—Walter Cronkite was wonderful!

Excellent!

Reception time too compressed. Start at 5:30/5:45 would be better. People were waiting.

Dinner served too late, obviously because of many factors.

Too many introductions of "dignitaries" in the audience.

Shorten Forum, if dinner is afterward.

Elimination of the "student question/answer" portion was a definite plus. Please don't re-institute it next year.

I enjoyed every part of the evening. It was fantastic!

Very good!

What an informative, interesting evening! Thank you so much. We were pleased by the grand audience, too.

It was lovely—well-done—elegant.

It was the best Forum this time.

Was GREAT!!

I enjoyed this Forum very much!

Excellent presentation—superb!

The Forum was extremely interesting and educational. Most of all, however, it was eye-opening. The loss of America's vision over the last thirty years astounds me and probably leaves Dr. Von Braun rolling in his grave.

What an insult—you stuck the Germans in the back corner. I thought we were supposed to be honoring them—not us.

They've all been great!!

Excellent

Walter Cronkite was great. There are several other newspersons who have covered the space program from the "early days", including Jay Barbree (NBC). Jay is a tremendous space reporter—one of the best. He is also an author of several books.

Is 'black-tie" necessary? Also, eliminate dancing at end. Well done program. Film was outstanding.

Some information on other galaxies with planets.

Program was excellent this year.

This year's event was the best! Thank you for bringing Walter Cronkite and The Discovery premiere to Huntsville.

What topic would interest you at a future forum?

Quest to give Dr. Arthur Rudolph his American citizenship back posthumously.

Future space exploration—moon and Mars

World affairs

Spaceports (Commercial & Government)

Titanic

Science: remote detection of Space E & M & EM Fields, Atoms, Molecules, related instruments

Hubble telescope, astronomy subjects

Spacecraft or aircraft

Technology transfer applications

Mercury 7—the original seven astronauts

Program for participating local private space collectors, those who have followed the space program early on. We have "unique" collections and great stories to share. It's amazing and historical.

Focus more on future rather than the past for next forum.

Possible life on other planets.

Speakers on Space Station and Mars exploration.

Free Admission

9th Annual
Von Braun Exploration Forum
Friday, October 18 • 7:00 p.m. • VBCC Concert Hall

He Conquered Space

An original Discovery Channel Film, never seen before.

A profile of Huntsville's very own Wernher von Braun,
who pioneered space exploration.

Appearing In Person



Walter Cronkite Special Correspondent CBS News

> John Hendricks Founder, Chairman and CEO Discovery Communications, Inc.



5ponsored By:

NASA's Marshall Space Flight Center
The University of Alabama in Huntsville
The U.S. Space and Rocket Center
Discovery Communications Incorporated
The Association of Space Explorers
The National Space Society

Ticket Locations:

Admission is free but a ticket is required.

Pick up tickets at the following locations:

Von Braun Civic Center Box Office

Parisian

NASA's Marshall Space Flight Center Building 4200 Room 101

For information call: 205-890-6372 or 1-800-448-4035

An Affirmative Action/Equal Opportunity Institution

SECOND CONFERENCE ON

EROSPACE IVIRONMENTAL

August 6-8, 1996

Von Braun Civic Center

August 5: Tour MSFC Productivity Enhancement Facility, Combustion Research, and Failure Analysis Laboratories

- · Solid Rocket Motor Manufacturing and Disposal Technologies
- · Environmental Policy
- Oxygen Systems Cleaning: Issues and Approaches
- New Materials and Processes
- Approaches to Environmental Management
- Developments in Aqueous Cleaning
- Solid-Hybrid Rocket Motor Manufacturing and Use Replacement and Predictions Technology
- Approaches to Pollution Prevention Implementation

Course No. CM 0073-03

- Cleaning Methods and Mechanisms
- New Materials and Processes
- Hazardous Materials Tracking and Waste Minimization
- · Cleaning Verification and Instrumentation
- Air Emission Reduction and Control
- Coatings: Application and Removal
- Information Technology
- Cleaning Verification and Instrumentation

Addressing the use of New Technology based on the standpoint of NASA, DoD, DoE & the Aerospace Industry

- Corporate and **Government Exhibits**
- Concurrent Sessions Over 100 Presentations

For more information: (205) 895-6372 or 1-800-448-4035

SPONSORING AGENCIES:

NASA's Marshall Space Flight Center; NASA's Operational Environment Team; NASA's Office of Space Flight; Aerospace Industries Association, SAMPL - Space Manufacturing Thrust Committee; The University of Alabama in Huntsville, Division of Continuing Education - Conferences, National Center for Manufacturing pences; American Society of Metals, International; American Institute of Aeronautics and Astronautics; Air Transport Association Confronmental Protection Age

VON BRAUN EXPLORATION FORUM

OCTOBER 18, 1996

DISCOVERY CHANNE! PREMIERE! Come join the Discovery Channel to celebrate the world premiere of the the film, "He's Going to Space," about the life of Dr. Wernher vo

Braun and to recognize the world-changing heritage of North Alabama in the exploration of space. The annual event, hosted by NASA/MSFC, the U.S. Space & Rocket Center, and The University of Alabama in Huntsville, will premiere the feature television program in a presentation which includes celebrities and explorers.

Admission is free, but ticket is required. Seating is limited. For information call (205) 895-6372.

9TH ANNUAL

WERNHER VON BRAUN MEMORIAL DINNER OCTOBER 18, 1996

The National Space Club-Huntsville will recognize individuals who have excelled in the field of aerospace through the Annual Space Flix Award, Astronuautical Engineering Award, Media Award, Community Service Award, and Scholarship Award. Previous winners of the Dr Wernher von Braun Space Flight Award are Sally Ride, Alan Shepard, Jack Lee, Major General John Zierdt, Dr. Ernst Stuhlinger, Rear Adn Richard Truly, J.R. Thompson, and Senator Howel! Heflin. Plan to attend this premier, black tie event.

Evening events include:

Opening Reception

Von Braun Exploration Forum

Dr. Wernher von Braun Memorial Dinner

Dance

Course No. CM 0063-23; Individual Tickets for the Dinner are \$100 and must be purchased by October 4, 1996. Call 895-6811 for information.



PAID ADVERTISEMENT

September 30 - October 2, 1996 Spacecraft Systems

Los Angeles, CA
SPACECRAFT PROPULSION SYSTEMS.
Robert Sackheim and Dave Lewis provide
the fundamentals of spacecraft propulsion,
with emphasis on engineering and systems
design. The basic theory of rocket propulsion is presented to enable an understanding
of system selection and design methodology. Propulsion engineers, systems engineers, and mission planner shouldn't miss
this one. Presented by launchspace/US
Space Foundation. More information: 1800-553 5907/ www.launchspace.com

October 7 - 8, 1996 Satellite Seminar

San Francisco, CA EOSAT WILL BE HOSTING A 2 DAY SEMINAR where you will learn how to integrate a variety of satellite imagery and geographic information system technology to help you solve your problems. Hyalt Regency, San Francisco, CA. For more information, please contact len Ross at (216)447-8884.

October 14 - 18, 1996 Matlab & Simulink Boulder, CO

NORHALLAR SIMULATION USING MALLAR AND 98 INK Donaid Mackeson, Ph.D. tea. Judents how to use Matlab and Suna, a to model and samulate a wide variety of dynamic systems, including linear, nonlinear, discrete time, continuous lime, and hybrid systems. An important course for professionals, interested in space flight dynamics, sagnal processing control theory, and applied mathematics. Presented by Launchipae e/IUs Space Loundation. More information. J 1800:353-39077 www.launchibae.com. 1800:353-39077 www.launchibae.com.

October 18, 1996 Von Braun Forum

Huntsville, AL 91H ANNUAL VON TRAUN EXPLORATION FO RUM. The Decovery Channel World Premier Film, "He Conquered Space", celebrating the

PAID ADVERTISEMENT

life of Dr. Wernher von Braun, will be the highlight of this year's Forum. Special Guests will include Walter Cronkite, veteran journalist, and John Hendricks, Founder, Chairman and CEO of Discovery Communications. The Forum is sponsored by NASA/MSFC, Society of Space Explorers, National Space Society, the Space and Rocket Center, Discovery Channel, and the University of Alabama in Huntsville. Free admission, tickets required. for information: 1-800-448-4035.

October 18, 1996
Von Braun Dinner & Dance
Huntsville Al

Huntsville, AL
9TH ANNUAL DR. WERNHER VON BRAUN
MEMORIAL DINNER AND DANCE. National
Space Club - Huntsville will recognize individuals and groups who have excelled in the
field of aerospace through their annual blacktie event. This year's evening will include a
Special Premier Reception hosted by Discovery Channel, reserved seats at the Von
Braun Exploration Forum, the Memorial
Awards Dinner, and a special finale of music
and dancing with the Jimmy Church Band.
To purchase individual tickets or tables,
please call 1-800 448 4034 or 205-8906811

October 18 - 20, 1996 Space Frontier Conference Hollywood, CA

STACE YOUR RICKET TO RIDE. 5TH SPACE FRONTIER FOUNDATION CONFER FIXE. The Space Frontier Foundation will bring together the leaders, entreprineurs, and innovators in space industry to discuss key mains and the specialic steps needed to open the space frontier to private citizens and participants. Include Congressinal participants include Congressinal sample Brown, Charles Petel Conrad fastions spagn and DCX pilot), Rober Zubrin (Proneer Broket), John Rogers, Goptinon Foundation), Charles, Childer (Celeste), Chuick fair fastions (Properties), Rand Symberg (Interpt data Typic clines), Gary Hudson (HMX), and many others. Conference seeions will in clinde discussion of Space Jourism, Cheap Fasces, to Space, X Vehicles, Alphatown, Commercial Space, and Advanced Concepts The conference fees are \$70 until Oct. 4, 500 thereafter, will a one day rate of \$50. Student rates are available. For more information on the conference, visit the Space.

PAID ADVERTISEMENT

Frontier Foundation World Wide Web site at http://www.space-frontier.org send e-mail to Open Frontier @delphi.com, or call 1-800-78SPACE.

October 21 - 23, 1996 Aerospace Structures

Washington, DC
STRUCTURAL DYNAMICS ANALYSIS & DESIGN. Irving Ojalvo, Sc.D, offers an in-depth
overview of analytical and numerical methods used on aerospace structures subjected
to dynamic loads. The goal is to help engineers intelligently model structures and interpret the numerical results obtained by existing software. The first 20 registrants will receive a 200-node NASTRAN CD. Presented
by Launchspace/US
More information:

Nore information:

1-800-553-5907/
www.launchspace.com

October 22 - 24, 1996 Satellite Systems

Washington, DC
SATELLITE SYSTEMS DESIGN AND ENGINEERING. Marshall H. Kaplan, Ph.D., and Wilbur L. Pritchard explain satellite technologies and systems for the beginner and expert. Recommended for professionals interested in current satellite systems developments, while acquiring a broader background in the design, development, and use of spaceraft. Presented by Launchispace/US Space Loundation. More information. 1:800-553-5907/www.launchispace.com.

October 23 - 25, 1996 Sounding Rockets Washington, DC

PARTITION OF Rechard Screedon offers a destabled took at the international scientific standing rocket development and some of the agreticant published scientific results will be presented. Attendees will be exposed to the myraid interfaces that must be dealt with to effect a sincersful launch. Presented by Launchespace 4US Space Foundation. More into. 7

www.haunichspace.com

October 2
Inertial In
Boulder, C
ACCELEROMI
DIOMETERS &
Sonnabend, P
of inertial inst
between acce
theory of eac
and explained
whenever pos
those interes
by Launchs
More into:
space.com

October 2 ITC/USA ' San Diego ITC/USA '96 TY TO THE \ nual Internat (ITC) Oct. 28 Convention ITC USA '96 program inc processing of conference v advanced to Ribbon Pane more than tion exhibitor ernment age Cost of the rather 9/28/96 tion informat ng Rom to 1415, 436.6 http://www.1

Electrical Houston, As World ACI to a line of agree of the control of the control of the control of the control of the the control of the control of the the control of the control of the control of the the control of the control of the control of the the control of the control of the control of the control of the the control of the control of the control of the control of the the control of the control of the control of the control of the the control of the control of the control of the control of the the control of the control of the control of the control of the the control of the control of the control of the control of the the control of the control

e e traca chopic

et etti

Novembe

ADVERTISEMENT IN SPACE NEWS, SEPTEMBER 23, 1996 AND SEPTEMBER 30, 1996

PAID ADVERTISEMENT

October 8 - 9, 1996 Space inflatable Technology

Pasadena, CA
THE SPACE INFLATABLE TECHNOLOGY NATIONAL WORKSHOP will take place in Pasadena, CA, October 8-9, 1996. To register, contact Pat McLane, 818/354-5556, FAX
818/3934992, conf.admm@pl.nasa.gov

October 9, 1996 USAF Forum For Industry

McLean, VA
USAT FORUM FOR INDUSTRY. Senior Leaders of U.S. Air Force Headquarters and Major Commands will discuss their vision and new for modeling, simulation and simulation support for training and education. Included in the agenda will be an updgate on the ongoing Air Force Chief of Staff directed activity to Revolutionize Fraining, which includes evaluation of how simulation technology will affect future Air Force training concepts and philosophies, as well as an evaluation of how simulators and simulations can be used to improve the identification of new concepts and weapon systems development. These briefings will reflect the Air Force's raindly evolving needs for integrated simulation and training solutions, and will high light areas, where industry can expect to see further regionements for their products. For additional adormation call NTSA, Barbara McDaniel (76.5, 217.7569). Refer to meeting #711 mitia.

0 .er 9 -10, 1996 PSTS-96

Laurel, MD 1996 134 CTION 511081 11 CHIOLOGY SYM 1996 134 CTION 511091 11 CHIOLOGY SYM 1996 134 CTION 6131, 96). The Kossakoff Conference creder, the Johns Hopkins, University Applied Physics Caboratory, barrel, MD. The classified symposium is approximed by the Precioum Strike Association (PSA), the Association for Omnumed Vehicle Systems. Capital Chapter (APC) and the Association for Modeling, Planning and Simulation (AMCS). Attendengement by 11. citizens and be cleared to the SE CRET. [see Attendance is limited to 300, Contact PSA, 8025 Harmaker Court, Surfe 300, Fairtax, VA 22 301 - Tel., 203 204 9107 / Fax 203 204 9325.

PAID ADVERTISEMENT

October 14 - 18 Matlab & Simulink Boulder, CO

NONLINEAR SIMULATION USING MATLAB AND SIMULINK. Donald Mackison, Ph.D., teaches students how to use Matlab and Simulink to model and simulate a wide variety of dynamic systems, including linear, nonlinear, discrete-time, continuous-time, and hybrid systems. An inportant course for professionals interested in space flight dynamics, signal processing control theory, and applied mathematics. Presented by Launchspace/US Space Foundation. More information: 1-800-553-5907 / www.launchspace.com

October 16 - 18, 1996 TechNet Europe

Brussels, Belgium
TECHNET EUROPE '96. AFCEA 17TH ANNUAL
SYMPOSIUM AND EXPOSITION. October 1618, 1996, Brussels, Belgium. Main therre will
be "Managing the Peace Offensive" with subthemes including Partnership for Peace Indiative. NATO-Intelink, Information Warfare,
UN/NATO Coordination for Peace Implementation, NATO Out-of-Area, Operations: Lessons
ILearned in Bosina. For more information, conluct AfCEA Europe at tel 32 (2) 705 27 31, fax
32 (2) 705 28 94, e-mail: afcea@infobcard.be

October 18, 1996 Von Braun Dinner/Dance Huntsville, AL

91H ANRIDAL DR. WERTHER VON BRAUN MI MORIAL DINNER AND DANCE National Space Club Fluorizalle will recognize indicaduals and groups, who have excelled in the feet of perceptive through their annual black be event. Here, yearly, evening, will include a Special Frence Reception hosted by Discovery Channel, reserved seats at the Von Braun Explorators forom, the Memorial Awards Danner, and a sessial holde of miniciand dancing with the among Chanch Braun. To purchase individual topics, or tables, pleane call, 1,500,448,4034. pp. 205-880,6511.

October 18, 1996 Von Braun Exploration Forum Huntsville Al

Huntsville, AL.

9TH ANNUAL VON BRAUN EXPLORATION For a RUM. The Discovery Channel World Premier Humm "The Conquered Space", celebrating the life of Dr. Wernlier von Braun, will be the highlight of this year's Forum. Special Guessa will 4.

PAID ADVERTISEMENT

nclude Walter Cronkite, veteran journalist, and John Hendricks, Founder, Chairman and CEO of Discovery Communications. The Forum is sponsored by NASA/MSFC, Society of Space Explorers, National Space Society, the Space and Rocket Center, Discovery Channel, and the University of Alabama in Huntsville. Free admission, tickets required. For information: 1-800-448-4035

October 21 - 23, 1996 Dynamics Analysis & Design Washington, DC

STRUCTURAL DYNAMICS ANALYSIS & DESIGN. Irving Ojalvo, Sc.D, offers an in-depth overview of analytical and numerical methods used on aerospace structures subjected to dynamic loads. The goal is to help engineers intelligently model structures and interpret the numerical results obtained by existing software. The first 20 registrants will receive a 200-node NAS TRAN CD. Presented by Launchspace/US Space Foundation. More information: 1-800-553-5907/www.launchspace.com

October 28 - 31, 1996 ITC-USA '96 Conf.,

San Diego, CA
ITCAUSA 96—TELEMETRY, LINKING REALITY
TO THE VIRTUM WORLD. THE 32ND ANNUAL
INTERNATIONAL TELEMETERING CONFERENCE
(ITC) OCT. 28.31 Town and Country Hotel and
Convention Center, San Diego, CA. ITCAUSA
96 offers an extensive technical program in
cluring papers on new applications, real-time
processing and digital signal processing concepts and application. The conference will
also include introductory and advanced tolemetry short courses, a Blue Ribbon Panel and displays and exhibits from more than 100 telemetry and instrumentation exhibitors including
manufacturers, government agencies, and military fest ranges. Cost of the conference is
\$\$50.00 in advance (by 9/28/340) or \$90.00 on
site Registration information may be obtained
by contacting Norm Lant (310) 336.4200 by
Laz at (310) 336.6885 or visit our Home Page
at 19th //www.Melemetry.org.

Oct. 30 - Nov 1, 1996 Politics/Systems Design Washington, DC

HE POLITICAL PROCESS IN SYSTEMS ARCHITECTURE DESIGN. De Brenda Forman teaches an all new course on show politics drives system designs. A must for professional engineers and sentistis involved with publicity funded high technology programs, and for man

agers and £ ture technic States. pre Foundation. 5907/www

Novembe 1

Election Washing ELECTION CONGRESS political exp define DoD and analyze results on include we perts: Pat gressional port senior scholar at Thomas M Studies Pro and Ronald Weekly Reg CONGRESS 14 will prov mony prep niques Sr for of Spee in George V

Novembe Training Norfolk, HOMBING

tions Depar

sey Avenue ter, contact

Specialist with the Cocation: Ho

HARING The United cornete of range reso proaches. will increase private sas bearer to mo ever organ vervicer i range recid pointy restrict issué, such regulatory of Aramage bus not miss the Secure there :

Life

Section

D

Cronkite on space



Stave Friedman

Walter Cronkite, who will speak in Huntsville on Oct. 18. says he still dreams of suiting up for a trip to the moon.

"There was a great intensity about him. I found it hard to engage in a kind of just basic conversation. It was all very technical."

- Walter Cronkite on Wernher von Braun

Von Braun forum will feature giant of TV news

By MARTIN BURKEY

Times Aerospace/Science Write

eteran television newsman Walter Cronkite will be the guest speaker for the 9th Annual Dr. Wernher von Braun Memorial Forum Oct. 18 at the Von Braun Civic Center, organizers confirm.

Center, organizers confirm.

The Forum will also feature the Discovery Channel world-premier film "He Conquered Space" celebrating Von Braun's life, with special guest John Hendricks, founder, chairman and CEO of Discovery Communications.

A 6 p.m. reception will be followed by the forum at 7 p.m. and a black-tic dinner and awards after, sponsored by the National Space Club—Huntsville.

During more than 60 years in journalism, the last 45 with CBS News, Cronkite covered nearly even major news event in the space program, from Alan Shepard's first flight in 1961 to the fall of Skylab in July 1979. He received Enimy Awards for his reporting.

In a recent phone interview. Cronkite said he knew a lot about Von Braun even before he met him.

"I was always impressed with him," he said, "I had been tollowing the scramble between the Soviet Union and the United States

for the Peenemeende scientists, i knew most of their names. I was pleased that they had come to the United States by whatever means was finally arranged for that.

Cronkite has been in Germany the first year after the war and covered the Noremburg trails of Nazi war criminals. Having lived through World War II, it was hard to separate any top German official from the horrors of Naziism, he said. He first met the head of the rocket team at Cape Canaveral. Not knowing what to expect from "a former Nazi engineer," he was immediately impressed by his friendli-

"We lumped everybody in that basic category," he explained. "We always kind of had our guards up when we met him. There was a great intensity about him. I found it hard to engage in a kind of just basic conversation. It was all very technical. He was defi-

Please see CRONKITE on D3

To get tickets

The 9th Annual Dr. Wernner von Braun Memorial Forum will be held Oct. 18 at the Von Braun Civic Center. Tickets are free and will be available Oct. 1 at the civic center, Parisian and Marshai Space Flight Center. For more information, contact the National Space Club—Huntsville at 895-6811.

ronkite

Continued from page D1

nitely enthusiastic. He was constantly concerned about the (NASA) appropriation."

Cronkite eventually found few of the Von Braun engineers to be "stiffly Prussian" as he had expected. They all seemed to be focused on the space program and didn't seem particularly ideological.

Cronkite said he had no doubts about the decision to bring the rocket engineers to the United States. It was "a life or death matter," he said. The two countries had developed atomic weapons. It was obvious the missile was the way to deliver them.

"It was pretty essential that we keep up with the Russians in that development," he said. "These Peenemuende engineers were the

best in the world.

Over the years, Cronkite would cover the Kennedy assassination, the Vietnam war, the Sadat and Begin peace talks, the Khrushchev visit, Nixon in China, Watergate and more. The space program was a vastly different story, he said.

"It was a positive story," he recalled. "It was the saving grace of the '60s. It was a very turbulent decade, a very depressing decade, the assassinations of Medgar Evers. John and Bobby Kennedy, the Wallace shooting, race riots, the period of Vietnam dissension. It was a terrible decade except through it all we could look up to the skies for some relief and believe maybe we had something better going for us."

It was almost predictable from the beginning of the space program that its record of success would also be marred by apathy,

Cronkite said.

"The excitement of it is whether it's going to work or not," he said. "Whether or not we needed all those flights or not is debatable. When we could prove it was going to work with regularity required to explore space people were going to lose interest. That is perfectly normal. I don't find that depressing at all. Once the iron horse proved it would run on rails, carry people safely, people quite thinking it was an experience. It was simply a means of transportation.'

Cronkite's reaction as he watched astronauts land on the moon echoed the reaction of many

and seemed to capture the moment just as well.

"I'd had just as long to plan for that historic moment as NASA, he said. "When the landing took place, I was just speechless. It was just an incredible performance. getting them down there safely.'

NASA's problem today is getting people excited about space when it's not quite an adventure just getting there anymore, Cronkite said. The permanent space station should provide excitement.

Based on his popularity, knowledge and experience, Cronkite was considered a leading contender to go into space himself as part of NASA's Journalist in Space program in the early 1980s. Like the Teacher in Space program, however, the plan was dropped after the 1986 Challenger accident.

"I think I might have had a pretty good shot at it," he said, with a knowing tone. "I made all the cuts up to the Challenger disaster. If I'd passed the physical — and I think I would have - I'd sure love to

think so.'

At 79, he's still busy. He's finishing an autobiography that will hit stores in early December. He's got eight hours of a program called Cronkite Remembers" coming to the Discovery Channel in midwinter. But he's still ready to go as far as NASA could carry him.

"Oh, you bet I'd like to go," he said. "I'm afraid my only problem would be seeing the bottle half empty. If they gave me a chance to go to orbit, I'd really like to go to

the moon.

He Conquered Space'

By DEBORAH STOREY

Times Staff Write

ohn Hendricks was only about 10 years old when President John F. Kennedy came to Huntsville. His memories of the big event in his hometown are still vivid more than three decades later.

Kennedy came to Marshall Space Flight Center in May 1963 (and earlier, in September 1962) to underscore his support of the space program and see whether America really would be able to land a man on the moon by the end of that tumultuous decade. The president in 1961 had promised that to the nation, and it was important that the

Discovery Channel Chief Executive Officer John Hendricks, front, with Mike Quettrone, executive in charge, center, and Tom Caliandro in the screening room in Bethesda, Md.

Please see SPACE on G3

ARTICLE IN THE HUNTSVILLE TIMES, OCTOBER 6, 1996

Space

Continued from page G1

promise be kept.

Hendricks was far from Kennedy at his public appearance that day. The boy could barely see Kennedy or the space scientist by his side in the swirl of a cheering crowd. Together, the American president and the German scientist formed a charismatic team that could infuse an audience with a unified, can-do spirit that some would argue hasn't been seen in this country since.

The scientist was Dr. Wernber

von Braun.

The boy would grow up to be the founder of Discovery Communications Inc., which launched the Discovery Channel on cable

television.

More than 30 years later, Hendricks is using his network to help pay homage to von Braun in a 52-minute documentary that examines the man whose earliest rocket successes in wartime Germany paved the way for Neil Armstrong and Buzz Aldrin to plant the Stars and Stripes on the moon in 1969.

Hendricks still embodies a little of that 10-year-old's enthusiasm when he speaks of von

Braun.

"It's an example of how one human being can really make a difference, one determined individual who has a dream," he said in an interview from Discovery Communications headquarters in Bethesda, Md.

"If you don't dream, you'll never have a dream come true, Hendricks said. "He was just a sterling example of how one person's life can affect so many oth-

Von Braun's particular combination of scientific skills, leadership and public-relations savvy was critical to the success of America's space program, Hendricks said. In fact, he believes that this nation wouldn't have beaten the Russians to the moon without him.

"Embodied in one person was the spirit of getting us to the moon," Hendricks said, "and he did it."

The Discovery Channel biography called "He Conquered Space" is narrated by veteran journalist Charles Kuralt. The program will make its debut here Oct. 18 at the ninth annual Dr. Wernher von Braun Memorial Forum at the Von Braun Civic Center. Walter Cronkite is the special guest for this year's forum. Free tickets are available at the civic center, local Parisian stores and the Marshall Space Flight Center. Call 895-6811 for information.

After debuting here, "He Conquered Space" airs on Discovery Dec. 1 at 9 p.m. Hendricks will come to the Huntsville forum to .

introduce the program.

Featured in the documentary are several interviews with Huntsvillians, including von Braun's fellow team members Ernst Stuhlinger, Konrad Dan-nenberg and Walt Wiesman; Ed Buckbee, former director of the U.S. Space & Rocket Center and NASA information officer, local historian Margaret Belle Crow; and Ruth von Saurma, former NASA public affairs officer.

The retrospective of von Brann's truly stellar life's work

also includes commentary by his friend and "20/20" anchor Hugh Downs, von Braun biographer and former NASA space information systems chief Frederick Ordway and several other key figures in the space program. The documentary has historic footage of Huntsville from the 20 years von Braun lived here. Magnus von Braun, Wernher's younger brother who lives in Phoenix, agreed to a rare interview for the documentary.

Hendricks himself came up with the idea for the program about two years ago when he came to Huntsville to premiere another Discovery program on the space shuttle.

"I was thinking all of our space efforts owe so much to one incredible personality who was so determined to see this dream of going into space," Hendricks said.

When Hendricks was a teen-ager, von Braun was one of his heroes, he said. Hendricks even kept a scrapbook tracing the progress of the space program.

As an established success in the competitive world of cable television. Hendricks now believes that the positive attitude characteristic of the space program's heyday in Huntsville made him believe anything was possible.

"When I grew up there, the place was so inspiring," he said. The town was railted behind this great mission of getting man to the moon. I can't imagine a more inspiring place to grow up.

"There's nothing like that Apollo program to show what can be done," said the Butler High School graduate and University of Alabama in Huntsville alumnus. "Everybody was rallied behind that singular mission of making the rocket, making it work well, achieving success. It was phenomenal.'

Hendricks readily admits that he wouldn't be where he is today without some of the most useful byproducts of the space race satellites.

"My company owes its very existence to satellite technology," he said. "Today Discovery Channel is transmitted around the world on 15 satellites, we hit every continent, it's available in 140 countries, and it's all because of the space program.

As Hendricks and other members of his generation were growing up, the space program taught them that the nation could set lofty goals and work together to achieve them. The new documentary makes clear that Mars was von Braun's ultimate goal.

"I feel sad sometimes that my children aren't involved in an era where there's this great goal of, like, getting to Mars and it's well planned-out," Hendricks said.

But the Huntsville native continues to set and achieve his own goals.

"We're going to launch new channels in late October through digital satellite compression yet another gift of the space program," he said.

That will enable Discovery to uplink as many as six new channels, Hendricks said. Among those will be Discovery Kids service for children, Animal Planet, Discovery Science, Discovery History and Discovery Travel and Living.

Von Braun's legacy is farreaching, indeed.

ing of space age 'uplifting,' nkite tells von Braun forum

N BURKEY
space/Science Writer

veteran newscaster and a global municator combined Friday to give Huntsville audience a colorful retropective on the life and accomplishnents of rocket pioneer Wernher von ■ Von Braun forum award winners. Page A6.

Braur

Now in its ninth year, the Von Braun Exploration Forum featured the memories of former CBS reporter and anchor Walter Cronkite and the world premier

of a Discovery Channel documentary on von Braun's life introduced by Discovery Communications lounder and CEO John Hendricks, a Huntsville native

The forum is held to keep alive the vision and dedication to exploration of the famous rocket team leader and

Please see CRONKITE on A12

A12 The Huntsville Times, Saturday, October 19, 1996

Cronkite

Continued from page A1

Marshall Space Flight Center's first director. It is sponsored by the Marshall Center, the University of Alabama in Huntsville, U.S. Space & Rocket Center, Discovery Communications Inc., Association of Space Explorers and the National Space Society.

More than 800 guests in formal wear attended the forum in the Von Braun Civic Center and the dinner and awards ceremony afterward. At least that many members of the general public, including 200 local middle school students, were also at the forum.

The backdrop for both Cronkite's speech and the Discovery documentary was a civic center concert hall stage made to look like the lunar surface with a full Earth glowing against a field of stars.

The veteran CBS newsman got three standing ovations from an audience excited to see him in person. Grinning broadly after the first, he warned, "If you people aren't very careful, I'll run for something ... That's a joke. What wonderful people you are."

Cronkite, 80, who covered the space program from its beginning, told several stories about rocket launches and his memories of von Braun.

"I came here frequently in the very early days when Huntsville was the heart and core of America's thrust into space," he said. "What wonderful days they were. I don't know if we will ever relive those days. I hope so. The coming of the space age was so uplifting.

"At that juncture in our history, everyone seemed to be looking up."

The moon program, he said, provided sanity in the 1960s — a decade that saw assassinations, civil rights struggles and the Viet-



Glenn Baeske Huntsville Tanes

Walker Cronkite, second from left, jokes with guests carol Tevepaugh, center, and County Commission Chairman Mike Gillespie. The others are unidentified.

nam war. In 500 years, he predicted, the most memorable event of the late 20th century will be the moon program, the result of von Braun's "skill, ingenuity, determination and salesmanship."

He decried governments for their lack of vision or interest in research and exploration except when driven by military necessity. Cronkite noted that he was among the finalists for NASA's journalist in space program before it was canceled after the 1986 Challenger accident. He said he'd still go if he had the chance.

"Let us still hope decision makers give full consideration to our future in space," Cronkite said, "I hope we choose to keep reaching out, keep exploring worlds that are beckoning. The challenge awaits, Surely we won't turn our backs apon it."

Cronkite's time in Huntsville was out short after his wife slipped and fel. Thursday morn-

ing, forum organizers said.

He was seneduled to attend a reception, deliver opening and closing remarks at the forum and opening remarks at the black tie dinner afterward, as well as a toast to Hendricks and the life of you Braun.

Instead, he left shortly after his opening remarks at the forum to fly home to Martha's Vineyard to be with his wife.

The cable documentary "He Conquered Space," began with you Brain's interest in rockets as a child in pre-war Germany It followed his life intough World War II and the move by his German engineering team first to Fort Blass, Texas, then to Huntsville

Scenes from downtown Huntsville, Redstone Arsenal and the Marshall Center and recollections by one mores conceauces and othor Henry wans corresponding ment.

Title and Subtitle Research study entitled Exploration Workshop Co Wernher von Braun Explo Au.thor(s) Karen B. Mack Andrea Milligan Performing Organization Name an University of Alabama in Hun Huntsville, Alabama 35899 2. Sponsorng Agency Name and A National Aeronautics and Spi	ncepts" for the ration Forum.	5. Report Due 2/28/97 FINAL REPORT 6. Performing Organization Code University of Alabama in Huntsville 3. Performing Organization Report No. 10. Work Unit No.
Title and Subtitle Research study entitled Exploration Workshop Co Wernher von Braun Explo Au.thor(s) Karen B. Mack Andrea Milligan Performing Organization Name an University of Alabama in Hun Huntsville, Alabama 35899 2. Sponsorng Agency Name and A National Aeronautics and Spi	, "Evaluation of ncepts" for the ration Forum.	5. Report Due 2/28/97 FINAL REPORT 5. Performing Organization Code University of Alabama in Huntsville 3. Performing Organization Report No. 10. Work Unit No.
Research study entitled Exploration Workshop Co Wernher von Braun Explo Author(s) Karen B. Mack Andrea Milligan Performing Organization Name and University of Alabama in Hum Humtsville, Alabama 35899 2. Sponsonng Agency Name and A National Aeronautics and Spin	ncepts" for the ration Forum.	2/28/97 FINAL REPORT 5. Performing Organization Code University of Alabama in Huntsville 3. Performing Organization Report No. 10. Work Unit No.
Research study entitled Exploration Workshop Co Wernher von Braun Explo Author(s) Karen B. Mack Andrea Milligan Performing Organization Name and University of Alabama in Hunt Huntsville, Alabama 35899 2. Sponsonng Agency Name and A National Aeronautics and Spi	ncepts" for the ration Forum.	2/28/97 FINAL REPORT 5. Performing Organization Code University of Alabama in Huntsville 3. Performing Organization Report No. 10. Work Unit No.
Exploration Workshop Co Wernher von Braun Explo Author(s) Karen B. Mack Andrea Milligan Performing Organization Name an University of Alabama in Hun Huntsville, Alabama 35899 2. Sponsorng Agency Name and A National Aeronautics and Spi	ncepts" for the ration Forum.	6. Performing Organization Code University of Alabama in Huntsville 3. Performing Organization Report No. 10. Work Unit No.
. Au.thor(s) Karen B. Mack Andrea Milligan Performing Organization Name an University of Alabama in Hun Huntsville, Alabama 35899 2. Sponsoring Agency Name and A National Aeronautics and Spi	nd Address	University of Alabama in Huntsville 3. Performing Organization Report No. 10. Work Unit No. 11. Contract or Grant No.
Karen B. Mack Andrea Milligan Performing Organization Name an University of Alabama in Hun Huntsville, Alabama 35899 2. Sponsoring Agency Name and A National Aeronautics and Spi		University of Alabama in Huntsville 3. Performing Organization Report No. 10. Work Unit No. 11. Contract or Grant No.
Karen B. Mack Andrea Milligan Performing Organization Name an University of Alabama in Hun Huntsville, Alabama 35899 2. Sponsoring Agency Name and A National Aeronautics and Spi		3. Performing Organization Report No. 10. Work Unit No. 11. Contract or Grant No.
Andrea Milligan Performing Organization Name an University of Alabama in Hun Huntsville, Alabama 35899 2. Sponsoring Agency Name and A National Aeronautics and Spi		10. Work Unit No.
Andrea Milligan Performing Organization Name an University of Alabama in Hun Huntsville, Alabama 35899 2. Sponsoring Agency Name and A National Aeronautics and Spi		11. Contract or Grant No.
Performing Organization Name an University of Alabama in Hun Huntsville, Alabama 35899 2. Sponsoring Agency Name and A National Aeronautics and Sp.		11. Contract or Grant No.
University of Alabama in Hun Huntsville, Alabama 35899 2. Sponsoring Agency Name and A National Aeronautics and Spa		
University of Alabama in Hun Huntsville, Alabama 35899 2. Sponsoring Agency Name and A National Aeronautics and Sp.		
2. Sponsoring Agency Name and A National Aeronautics and Sp.	irzaina	3400 20000 D O 154
Sponsoring Agency Name and A National Aeronautics and Sp.		NAS8-38609 D.O. 154
National Aeronautics and Sp.		13. Type of report and Period covered
National Aeronautics and Sp.		Research Study - 1 year
National Aeronautics and Space Administration Washington, D.C. 20546-001	14. Sponsoring Agency Code	
Marshall Space Flight Center	r. Al. 35812	14. Sponsoring Addrey Cook
6.Abstract		
Education, shall perfor for exploration worksho resources and facilitic concepts through the do	rm an assessment and pops. The university sees to support the assection of the well and the university shall be university shall be assected.	rough its Division of Continuing in-depth review of the workshop concept shall provide necessary personnel, essment and review of various workshop orkshop results, status of problem ll provide written reports summarizing
17. Key Words (Suggested by Auth	nor(s)) 18	. Distribution Statement
19. Security Class. (of this report) Unclassified	20. Security Class. (of this Unclassified	page) 21. No. of pages 22. Price